A.P. SIMRI KAUR

B.Com (H) II Banking Operations and procedures

Commerce and Management Department

Long Questions:

1. What do you mean by banking system? Discuss in detail structure of banking system and types of banks prevailing in India.

2. What do you mean by Reserve Bank of India? Discuss in detail role of Reserve Bank of India as a regulator of banking system in India.

3. What do you mean by banking technology ? discuss in detail role of mobile banking and internet banking sector in India.

4. What do you mean by credit cards ? discuss in detail mechanism, types of credit cards. Discuss in detail regulatory framework applicable to credit cards in India.

5. What do you mean by discounting of bills? Discuss in detail types of bills. Describe in detail regulatory framework applicable to discounting of bills in India.

6. Define Commercial Bank. Discuss it's functions also.

7. Discuss the structure of cooperative banks. Distinguish between

 public and private banks

8. What are various types of Bank account? Explain the procedure for

opening a current Account in a bank.

9. State the special features of the relationship between banker and customer.

10. Define Leasing? State the advantages and limitations to the lessor and lessee.

11. What is merchant banking. Discuss functions of merchant bankers.

12. Explain various types of negotiable instruments and difference between them.

13. Discuss various methods fo Money Laundering. Explain various Anti- Money

   Laundering Measures in India.

14. Briefly explain the structure of Financial System.
15. Explain the functions of RBI.
16. Explain about Qualitative & Quantitative Credit Control Measures of RBI.
17. Bring about the role played by RBI in Economic Development of the country.

18. Bring out the merits and demerits of Branch Banking System.

18. Briefly describe the functions of commercial banks.

19. What is co-operative banking? Briefly explain its functions and drawbacks.

20. What are Regional Rural Banks? Explain the features and bring out its drawbacks.

21. What is Retail Banking? Explain its features.

22. Briefly explain Modern Banking Facilities.

23. Explain the advantages of E-Banking.

24. Explain the procedure for opening of Bank Accounts.

<div align="center">or</div>

25. Explain the precautions to be taken by a customer while opening an account.

26. Define Banker and Customer. Explain briefly about the General Relationship between them.

27. Define Banker and Customer. Describe the special relationship between banker and

customer

28. What is stock Exchange? What are its functions?

29. What is SEBI? Explain its functions.

30. What is Merchant Banking? Briefly explain the functions of Merchant Banking

Short questions:

1.) Meaning & Definition of Bank   2.) Financial Markets

3.) Financial Services   4.) Financial Institutions

5.) Financial Instruments   6.) Chain & Group Banking

7.) Correspondent Banking   8.) Deposit Banking

9.) Investment Banking   10.) Mixed Banking

11.) Write a brief note on CRR & SLR.   12.) Write a brief note on Repo and Reverse Repo Rate.

13. Difference between General Lien and Specific Lien.

14. Write a short note on:

ATM, Debit Card, Credit Card, Net Banking, Payment Banking, Tele Banking

15. Write a short note on Garnishee Order.

16. Write a short note on Dormant Account.

17. What is Bancassurance.

18. Duties of Banking Ombudsman.

19. What is pass book.

20. Short note on Regional Rural Banks

21. Difference between Branch Banking and Unit Banking.

22. Functions of RBI

23. What is Garnishee Order.

24.Rights of Holder in Due course

25. SARFAESI Act

26. Duties of Stock broker.

27.Explain DRAT and NPAs

28. Special Relationship of Banker and Customer.

A.P Simri kaur

Business Law Question Bank.   Class - B.Com (H) - I

Commerce and Management Department

Unit I - Indian Contract Act

Nature & kinds of contract

Q1. "An agreement enforceable by law is a contract." Discuss the essential elements of a valid contract.

Q2. "All contracts are agreements, but all agreements are not contracts". Discuss this statement in the light of section 10 of the Indian Contract Act.

Q3. What are the different kinds of contract?

Q4. What do you understand by 'void & voidable' contracts? Discuss the rights & obligation of parties to a void contract & to a voidable contract after its rescission.

Offer & Acceptance

Q5. Define the term 'offer'. Explain the legal rules regarding a valid offer.

Q6. What do you understand by the term 'acceptance'? What are the essentials of a valid acceptance?

Q7. A mere mental acceptance, not evidenced, by words or conduct is, in the eye of law, no acceptance." Explain by giving examples.

Consideration

Q8. Define consideration. What are the essential elements of consideration?

Q9. State the exception to the rule-'no consideration, no contract'.

Q10. "Insufficiency of consideration is immaterial; but an agreement without consideration is void". Explain.

Q11. "A stranger to the consideration can sue but a stranger to contract cannot sue". Explain.

Q12. "Consideration need not be adequate but it must have some value in the eyes of law." Explain.

Capacity of parties

Q13. What do you understand by 'capacity to contract'? What is the effect of agreements made by persons of unsound mind?

Q14. Discuss in detail the provisions of law relating to minor's agreements.

Free Consent

Q15. "For giving rise to a valid contract, there must be consensus ad-idem among the contracting parties" Explain this statement & discuss the meaning of 'free consent'.

Q16. When the consent said to be given under coercion? What is the liability of a person to whom money has been paid or goods have been delivered under coercion? How coercion differs from undue influence?

Q17. Define the term 'misrepresentation.' What is its effect on the validity of a contract? Distinguish it from fraud.

Q18. Discuss the laws relating to the effect of 'mistake' on contracts.

Legality of Object & Consideration

Q19. In what cases the object & consideration of an agreement are said to be unlawful under the Contract Act? Illustrate with example.

Q20. What do you understand by an illegal agreement? What is the effect of illegal agreements on collateral transactions?

Void Agreement

Q21. Discuss briefly expressly declared void agreements under the Indian Contract Act.

Q22. What is a wager? Is an agreement by way of wager void or illegal? Is a contract of insurance a wager?

Q23. Define the term "contingent contracts". Discuss the rules relating to the performance of contingent contracts.

Q24. What do you understand by performance of a contract? State who can demand performance & by whom contracts must be performed?

Q25. State briefly the various modes in which a contract may be discharged.

Q26. What are quasi-contracts? Discuss the quasi-contracts dealt with under the Indian Contract Act.

Q27. What do you understand by the term Breach of Contract? Explain different remedies

available to a party under breach of contract.

Q28. Discuss different types of damages awarded by the court.

Indemnity & Guarantee

Q29. Differentiate between Contracts of Indemnity & Guarantee.

Q30. Define Guarantee. Discuss the rights available to a surety. When can a surety's be discharged from his liability?

Q31. What is guarantee? Discuss the features and types of guarantee.

Bailment & Pledge

Q32. Differentiate between Bailment & pledge.

Q33. What is bailment? Discuss the essential charcteristics of bailmet

Q34. What are the rights and duties of a bailor?

Q35. What are the rights and duties of a bailee?

Q36. Discuss the rights & duties of pawner & pawnee.

Agency

Q37. Define Agency. What are the different modes of creation of agency?

Q38. Discuss agency by ratification along with the necessary conditions for creation.

Q39. Differentiate between Sub-Agent & Substituted-Agent.

Q40. What are the rights & duties of an agent.

A.P. Simri kaur

Class : B.Com (H) -III

Commerce and Management Department

COST ACCOUNTING-IMPORTANT QUESTIONS

Questions: Introduction about cost accounting

Concept and objectives of cost accounting.

Advantages and scope of cost accounting.

Difference between cost and financial accounting.

Different types of Cost.

Different methods of costing.

Difference between product and period cost.

State the difference between cost control and cost reduction.

What are the essential factors for installing a cost accounting system? Explain.

What is meant by "cost centre"? What are the different type of cost centres?

State the difference between Cost Accounting and Management Accounting.

Questions (Material Costing)

Difference between LIFO & FIFO method of inventory valuations.

Difference between periodic and perpetual inventory valuation system.

Short note on EOQ(Concept and assumptions).

Short note on ABC technique of inventory control.

Distinguish between Bin card and Stores ledger.

Different types of Material Control techniques.

Questions (Labour Costing)

What is labour turnover and reasons of labour turnover.

Short note on accounting treatment of idle time and overtime with example.

Define 'Labour Turnover'. How is it measured? Explain.

33.Distinguish between Job evaluation and Merit rating.

(Overheads costing)

Questions :

Concepts and methods of overheads absorption.

Departmentalization of overheads.

Accounting treatment of over/under valuation of overheads.

Distinguish between allocation and apportionment of cost.

Discuss the step method and reciprocal service method of secondary distribution of overheads.

What are the methods of re-apportionment of service department expenses over the production departments? Discuss.

(Methods of Costing)

Questions:

Difference between process costing and contract costing.

Difference between process costing and job costing.

Difference between job costing and contract costing.

Accounting treatment of normal and abnormal losses in process costing

Short note on escalation clause in contract costing.

Short note on retention money in contract costing.

QUESTION BANK OF ECONOMICS

Principles of Economics-I/Micro Economics

B.Com-I, B.Com-I (Hons.)

Long Questions:

1. What do you mean by Demand Function? Explain the factors affecting demand.
2. State and explain the law of Demand. Why does demand curve slope downward?
3. State and explain the Law of Diminishing Marginal Utility. Also explain the exceptions of the law.
4. State and explain the Law of Equi-Marginal Utility. Also explain the importance of the law.
5. Define Indifference Curve. Explain its properties.
6. What is an indifference curve? Explain Income Effect, Price Effect and Substitution Effect.
7. Define Price Elasticity of Demand. Explain the various methods of explain it.
8. What do you mean by consumer's equilibrium? How it determined with ordinal approach?
9. What do you mean by consumer's equilibrium? How it determined with cardinal approach?
10. Explain the three stages of Law of Variable Proportion.
11. Explain the Law of Returns to Scale with the help of table and diagrams.
12. Explain the relationship between Total Revenue, Average Revenue and Marginal Revenue with the help of table and diagrams.
13. How price and output of firm is determined under perfect competition in the short run and long run period.
14. Define Monopoly? How price and output is determined under monopoly?
15. How price and output of firm is determined under monopolistic competition in the short run and long run period.
16. How price and output of industry is determined under perfect competition in the short run and long run period.
17. State and explain the Law of Decreasing Returns. Why does it applicable to agriculture only.
18. State and explain the Law of Increasing Returns. Also explain why it applicable to manufacturing only.

Short Note:

1. Define Consumer Equilibrium.
2. Define Price Line/ Budget Line.
3. Define Indifference Curve.
4. Define Selling Costs.
5. Monopolistic Competition.
6. Define Utility.
7. Distinguish between decrease in demand and extension of demand.
8. Define Elasticity of demand.
9. Meaning of Break-even Point.
10. Internal economies to scale.
11. Price-discrimination.
12. Distinguish between perfect competition and monopolistic competition.
13. Define Indifference Map.
14. Perfect Competition.
15. What is Kinked Demand Curve?
16. Define Monopoly.
17. Distinguish between firm and industry.
18. Types of demand.
19. Distinguish between internal and external economies of scale.
20. Distinguish between internal and external diseconomies of scale.
21. Define Giffen goods.
22. Distinguish between Perishable Goods and Durable goods.
23. Write four features of Indifference Curve.
24. Write conditions of Consumer Equilibrium of ordinal utility analysis.
25. Define Income elasticity of demand.
26. Define Cross Elasticity of demand.
27. Define TR, AR and MR.
28. Define Marginal Rate of Substitution.
29. Define Engle Curve.
30. What do you mean by profit forecasting?
31. Isoquant technique

Principles of Economics-II/Macro Economics

B.Com-I, B.Com-I (Hons.)

Long Questions:

1. Discuss the various methods of measuring National Income.
2. Discuss the features of Macro Economics.
3. What do you mean by Macro economics? Also discuss its importance.
4. "Supply creates its own demand" critically explain this statement.
5. "Full employment is a normal feature of capitalist economy" critically explain this statement.
6. Explain the Classical theory of income Output and employment. Also explain its significance.
7. Explain the Keynesian theory of income Output and employment. Also explain its significance.
8. State and explain the Psychological Law of Consumption functions along its implications.
9. State and explain the working of Multiplier.
10. State and explain the Static and Dynamic working of Multiplier.
11. "Multiplier is a two edge sword" explain it.
12. What is MEC? Discuss the factors of affecting marginal efficiency of capital.
13. What is Inflation? Explain the causes and effects of inflation.
14. Explain the Demand pull and cost push theory of inflation.
15. What is Trade Cycle? Explain the four phases of trade cycle.
16. What do you mean by consumption function? Explain the factors influencing consumption function.
17. Define investment. Also discuss its determinants.
18. Define Multiplier. Explain the relationship between marginal propensity to consume and multiplier.
19. Discuss causes of inflation and measures to control it.
20. Define Investment. Explain the factors on which influence the level of investment in an economy.
21. Define propensity to consume. Discuss the factors which determine the propensity to consume.

Short Note:

1. National Income.
2. NNP at Factor cost.
3. Difference between micro and macro economics.
4. Difference between personal and disposable income.
5. Propensity to consume.
6. Define average propensity to consume and marginal propensity to consume.
7. Define average propensity to save and marginal propensity to save.
8. Consumption function.
9. Define induced investment.
10. Define Autonomous Investment.
11. Define real investment and financial investment.
12. Define Multiplier.
13. What are the leakages of Multiplier?
14. Demand-pull inflation.
15. Cost-push Inflation.
16. Define Inflation.
17. Define trade cycle.
18. Define boom and depression.
19. Define recession and prosperity.
20. Define GNP at market price.
21. Relationship between MPC and Multiplier.
22. Define full employment.
23. Difference between closed and open economy.
24. Define Lassiz-fair economy.
25. Define MEC.
26. Define prospective yield and supply price.

Micro Economics and Indian Economy-I
B.A.-I, SEM-I,

Long Questions:

1. Critically examine the Scarcity definition of Economics.
2. How price and output of firm is determined under perfect competition in the short run and long run period.
3. What do you understand by Industry's equilibrium in short run and long run under perfect competition?
4. Define Monopoly? How price and output is determined under monopoly?
5. Define Discriminating Monopoly. How price and output is determined under it.
6. How price and output of industry is determined under perfect competition in the short run and long run period.
7. Critically explain the classical theory of rent.
8. Critically explain the Loanable fund theory of rent.
9. Explain the Ricardian theory of Rent.
10. Critically examine Risk theory of Profit.
11. Critically examine Uncertainty theory of Profit.
12. Critically explain the Modern theory of Rent.
13. Explain the theory of factor pricing.
14. Explain Dynamic theory of Profit and Innovation theory of Profit.
15. Explain main Features and defects of Indian Taxation System.
16. Explain composition and direction of foreign trade in India.
17. Define Balance of Payment. Explain its components.
18. What are the causes of unfavourable balance of payments and explain the measures to correct it.
19. Discuss the main objectives and features of economic planning in India.
20. Explain the achievements and failures of economic planning in India.
21. Define population explosion. Discuss the causes of over population and steps taken by the government to control it.
22. Explain the causes of poverty in India and explain the measures taken by the Government for poverty alleviation.
23. What are the causes of Unemployment in India and explain the steps that are taken by the government of India to increase employment.
24. Explain the causes of inflation and what measures are taken to control inflation.

Short Note:

1. Define perfect competition.
2. Define monopoly.
3. Monopoly power.
4. Discriminating Monopoly.
5. Causes of monopoly power.
6. Distinguish between Marginal Physical productivity and Marginal Revenue productivity.
7. Define net interest and gross interest.
8. Define gross profit and net profit.
9. Risk Theory of Profit.
10. Uncertainty Bearing Theory of Profit.
11. Main Features of Indian Tax System.
12. Main causes of adverse Balance of Payment.
13. Problem of Unemployment in India.
14. Problem of Inflation in India.
15. What do you mean by perfect knowledge?
16. Define Balance of Payments.
17. Write main causes of disequilibrium of Indian BoP.
18. Creeping inflation.
19. Hyper inflation.
20. Difference between perfect competition and pure competition.

MACRO ECONOMICS AND PUBLIC FINANCE

B.A. PART-II (THIRD SEMESTER)

Long Questions:

1. "Supply creates its own demand" critically explain this statement.
2. "Full employment is a normal feature of capitalist economy" critically explain this statement.
3. Explain the Classical theory of income Output and employment. Also explain its significance.
4. Explain the Keynesian theory of income Output and employment. Also explain its significance.
5. State and explain the Psychological Law of Consumption functions along its implications.
6. What do you mean by consumption function? Explain the factors influencing consumption function.
7. Define investment. Also discuss its determinants.
8. Define Investment. Explain the factors on which influence the level of investment in an economy.
9. Define propensity to consume. Discuss the factors which determine the propensity to consume.
10. State and explain the working of Multiplier.
11. State and explain the Static and Dynamic working of Multiplier.
12. "Multiplier is a two edge sword" explain it.
13. What is MEC? Discuss the factors of affecting marginal efficiency of capital.
14. Define Multiplier. Explain the relationship between marginal propensity to consume and multiplier.
15. What is macroeconomics? Discuss its importance.
16. What do you mean by inducement to invest? Explain the factors which affect inducement to invest in an economy.
17. What is meant by public expenditure? Discuss causes of its growth in modern times.
18. Define Public Finance. Discuss its nature and scope.
19. What is meant by public expenditure? Explain its effects on production and distribution.
20. What are the causes of the growth of public expenditure?
21. What is tax? Explain the types and canons of taxation.
22. Explain various types of public debt. Discuss economic effects of public debt.
23. Explain the methods of debt redemption.
24. Discuss the incidence and impact of taxation.

25. What is meant by incidence of a tax? Explain the factors involved in incidence and shifting of taxes.
26. Define deficit financing. Also explain its objectives and limitations.

Short Note:

1. Difference between micro and macro economics.
2. Define full employment.
3. Difference between closed and open economy.
4. Define Lassiz-fair economy.
5. Propensity to consume.
6. Define average propensity to consume and marginal propensity to consume.
7. Define average propensity to save and marginal propensity to save.
8. Consumption function.
9. Define induced investment.
10. Define Autonomous Investment.
11. Define real investment and financial investment.
12. Define Multiplier.
13. What are the leakages of Multiplier?
14. Define MEC.
15. Define prospective yield and supply price.
16. Define Investment demand schedule.
17. Define public finance.
18. Distinguish between progressive and regressive tax.
19. Explain characteristics of a good tax system.
20. Define incidence of taxation.
21. Define impact of taxation.
22. Define Public Debt.
23. Define Deficit Financing.
24. Define static multiplier.
25. Difference between direct and indirect tax.
26. Define budget deficit.
27. Define effective demand.

MACRO ECONOMICS AND INTERNATIONAL TRADE

B.A. PART-II (FOURTH SEMESTER)

Long questions:

1. Write a critical note on liquidity Preference Theory of interest.
2. Define Money. Also explain its functions and role.
3. Critically examine Cambridge Theory of Money.
4. Critically examine Fisher's Theory of Money.
5. Explain the functions and instruments of capital market.
6. Explain the main Instruments of Money Market and Capital Market.
7. Write notes on the following:
    i.   Objectives of Fiscal policy
    ii.   Instruments of Monetary Policy
8. Explain the credit creation process.
9. What is Inflation? Explain the causes and effects of inflation.
10. Explain the Demand pull and cost push theory of inflation.
11. What is Trade Cycle? Explain the four phases of trade cycle.
12. What is Monetary Policy? Explain the objectives and instruments of Monetary Policy.
13. Critically examine the Classical Theory of Trade.
14. Critically examine the H-O Theory of Trade.
15. Explain the J.S. Mill Reciprocal Theory of Demand.
16. Critically assess the impact of WTO on developing nations. Had they been benefited or exploited.
17. Write a note on objectives and achievements of World Bank.
18. What are the main components of BOP? How disequilibrium is measured and what are the reasons of disequilibrium.
19. Explain the purchasing power parity theory of rate of exchange.
20. Explain the mint parity theory of rate of exchange.
21. Write a detailed note on the objectives and achievements of IMF.
22. Discuss the objectives and functions of IMF. How far has the IMF proved useful to India?
23. Explain the objectives and working of IBRD.
24. Explain the types of Terms of Trade. On what factors terms of trade depend.

Short note:

1. Difference between Gross and Net Interest.
2. Primary functions of commercial banks.
3. Define money and its role.
4. Liquidity trap.
5. Explain Value of money.
6. Define factor intensity.
7. Define Trade Cycle.
8. Define Boom and Depression.
9. Define Inflation.
10. Methods to control inflation.
11. What determines terms of trade.
12. Causes of disequilibrium of BOP.
13. Objectives of World Bank.
14. Define SAARC.
15. Origin of SAARC.
16. Define Balance of Payment.
17. Define Rate of Exchange.
18. Define IMF.
19. Define IBRD.
20. Objectives of IMF.
21. Objectives of IBRD.
22. Explain the organization of SAARC.
23. Explain features of foreign exchange market.
24. How GATT is different from WTO.
25. Difference between balance of trade and balance of payment.
26. Demand-pull inflation.
27. Define Inflationary Gap.
28. Define factor abundance.

AP Harjinder Kaur

M.com 2nd (3rd sem)

MFS

Deptt of Commerce & Management

Short Questions:

1. What is Net Lease?

2. Mention Fund Based Activities.

3. Mention two Limitations of consumer finance.

4. What is a VISA Card?

5. What is revolving credit?

6. Name any Two Depositories

7. What is a Derivative?

8. Define Credit Rating?

9. What is Private Equity?

10. How does credit card differ from a debit card in use?

11. What do you mean by Financial Intermediation?

12. What do you mean by Discount Market?

13. What is Repo Rate?

14. define bank Rate.

15. Define Mutual fund.

16. Mutual fund charges.

17. Financial System.

18. What is a financial services market!

19. State the objectives of financial services?

20. Who are Merchant bankers

21. What is Seed Capital"?

22. Who are the parties to a leasing contract?

23. Write the meaning of "NAV?

24. Define the term 'Factoring 8. What are the assets suitable for securitizations?

26. What do you know about "CARE"?

27. Mention the rating grades of intemational rating agencies

Long Questions :

1. Discuss the role of financial services in the economic development of Country.

2. What is venture capital? Explain various factor considered while evaluating new project ideas by venture capitalists.

3. What is Mutual Fund? Critically evaluate mutual fund as an investment avenue for Individual invest.

4. How is factoring different from bill discounting? Also, explain Different methods of factoring.

5. Bring out the latest guidelines issued by SEBI concerning Venture capital financing in India

6. Explain different types of mutual fund schemes which are floated in India, What are the merits and demerits of each one of them?

7. Credit guidelines issued by SEBI concerning venture capital financing in India.

8. What is Meant by Securitization? Explain the process of it.

9. Different between Venture capital and seed capital

10. Explain the process of determining NAV

11. Mutual Fund Operation Mechanism

12. Different between Lease and hire purchase

13. Explain Financial Innovations

14.Types of mutual fund schemes

15..Different between Venture Capital and seed Capital

16.Explain Fund based and non _fund Based Financial Servies

17.Explain the functions of CSDL

18. What is Mutual Fund? Explain different types of mutual Funds.

19..List out the various types of financial services.

20.What are the activities performed by merchant bunkers as part of working capital

financing?

21.What are the means by which venture capitalists realize their investments?

22.How are the leases classified?

23. How are open-ended schemes of mutual fund different from the close-ended schemes of mutual fund?

24.What are the advantages of factoring? 17. Bring out clearly the various benefits of securitization

25. Identify the problems faced by the financial services market in India

26. Mention the codes of conduct outlined by the SEBI for merchant bankers. 20. Explain the mechanism of mutual fund operation and explain the advantages ofMutual Funds.

27. Distinguish between factoring and forfeiting

AP Harjinder kaur

Money & Banking

B.com 1 (H)

Short Questions :

1. What is Barter?

2. What is Cost-Push inflation?

3. What is Stagflation?

4. Define Reflation.

5. IMF stands for what?

6. IVRD stands for what?

7. Define Endorsement?

8. Devaluation

9. Forward Rates

10. Index number

11. Debt Finance

12. Bills of Exchanges .

13. Money Market

14. Letter of credit

15. Trade Cycle

16. Clearing House

17. Paper Money.

18. Note Issue

19. Commercial Bank

20. Monetary system

21. Credit Money

22. Money supply

Long Questions:

Q.1: Define money. Explain functions of money. and secondary

Q.2: Discuss various of the Evolution of Money.

Q.3: What are the factors that need to be considered while constructing index numbers? Discuss advantages of index

Q.4: Discuss the methods of Note issue.

Q.5: Discuss the reasons for dishonoring a cheque by a bank.

Q.6: Explain the functions of a Modern Commercial Bank.

Q.7: What is Monetary Policy? Discuss the Methods toachieve the objections of Monetary Policy. Q.8: What is a bill of exchange? Differentiate between Bill of exchange and promissory Note.

Q.9: Define barter System. What are defects or of Barter System? How has money defects?

Q.10: Define Bank. Discuss in detail different kinds of Banks.

Q.11: Define paper money. disadvantages of money? are the advantages and

Q.12: What are kinds of advances provided by a commercial bank? Discuss in detail.

Q.13: What the role of state bank of Pakistan in velopment of Economy?

Q.14: Define neg tiable instrument. Why these are called negotiable? Differentiate between bill of exchange and cheque.

Q.15: What is business finance? Discuss sources of

Business Finance?

Q.16: What are differences between traditional and Islamic Banks?

Q.17: What do you mean by Barter Exchange? Can it work when there is 'Double Coincidence of Wants' give reason?

Q.18: List the features of Barter Exchange?

Q.19: Define the term 'money'? List its components.

Q.20: What is meant by money supply? Discuss in brief the various constituents of money supply.

Q.21: Explain "difficulty in storing wealth" problems faced in the barter system of exchange.

Q.22: Explain the concepts of:-

Demand deposits held by commercial banks

Currency and coins with public

Q.23: Write the functions of money?

Q.24: Explain why money is called a medium of exchange?

Q.25: List the drawbacks of the barter system?

Q.26: What are the contingent functions of money?

Q.27: What is credit money? Explain the forms of credit money?

Q.28: Explain three motives of money?

B.com-II
Semester - IV
INCOME TAX LAW - II
QUESTION BANK

Long Questions

- ❖ Discuss section 80U
- ❖ Discuss the following deductions available under income tax act :
    1. deduction u/s 80D
    2. deduction u/s 80E
    3. deduction u/s 8GGB
    4. deduction u/s 80QQB
- ❖ What tax benefits are available to a person in respect of deduction allowed u/s 80C?
- ❖ What tax benefits are available to a person in respect of the donation made under section 80G? Discuss the provision of act in this connection.
- ❖ State the rules relating to assessment of HUF. Give the procedure of assessment on portion of HUF.
- ❖ What are provision of income tax act regarding the assessment of partnership firm assessed as firm and association of person?
- ❖ What are the restrictions imposed u/s 40[b] of income tax act on remuneration and interest payable to partners of a firm?
- ❖ Define residential status of company. Explain the procedure for computation of total income and tax liability of company assessee under income tax act.
- ❖ Explain the powers of CBDT and commissioner of income tax under income tax act 1961.
- ❖ Explain the various steps involved in the assessment procedure.
- ❖ What do you mean by best judgment assessment? Under what conditions is it made by the assessing officer? On what grounds can a best judgment assessment be cancelled?
- ❖ Under what circumstances can an ex-parte assessment are made by assessing officer? State the remedies available to the assessee.
- ❖ What do you mean by TDS? Discuss the provisions of law in respect of salary income and interest on securities.
- ❖ Explain in brief the provisions of income tax relating to advance payment of tax.
- ❖ What are the circumstances in which a claim for refund of tax may arise? Describe briefly the procedure of claiming a refund.
- ❖ What do you understand by the term appeal? Explain the procedure for filing an appeal to commissioner [appeals].
- ❖ What are the different penalties which can be imposed under the provisions of income tax act 1961?

Short Questions

1. Discuss section 80TTA.
2. Discuss the term Karta.
3. Discuss the term HUF.
4. What is LLP.
5. MAT.
6. Dates for filing the income tax return.
7. What is PAN?
8. Difference between MAT and AMT.

9. Advance payment of tax.
10. Give five examples of TDS.
11. Define the term refund.
12. TAN.
13. What is income tax appeal?
14. Appellate tribunal.
15. Scrutiny assessment.
16. All coparncers of HUF are members but all members are not coparncers. Justify.

Long Questions

❖ Discuss section 80U
❖ Discuss the following deductions available under income tax act :
  5. deduction u/s 80D
  6. deduction u/s 80E
  7. deduction u/s 8GGB
  8. deduction u/s 80QQB
❖ What tax benefits are available to a person in respect of deduction allowed u/s 80C?
❖ What tax benefits are available to a person in respect of the donation made under section 80G? Discuss the provision of act in this connection.
❖ State the rules relating to assessment of HUF. Give the procedure of assessment on portion of HUF.
❖ What are provision of income tax act regarding the assessment of partnership firm assessed as firm and association of person?
❖ What are the restrictions imposed u/s 40[b] of income tax act on remuneration and interest payable to partners of a firm?
❖ Define residential status of company. Explain the procedure for computation of total income and tax liability of company assessee under income tax act.
❖ Explain the powers of CBDT and commissioner of income tax under income tax act 1961.
❖ Explain the various steps involved in the assessment procedure.
❖ What do you mean by best judgment assessment? Under what conditions is it made by the assessing officer? On what grounds can a best judgment assessment be cancelled?
❖ Under what circumstances can an ex-parte assessment are made by assessing officer? State the remedies available to the assessee.
❖ What do you mean by TDS? Discuss the provisions of law in respect of salary income and interest on securities.
❖ Explain in brief the provisions of income tax relating to advance payment of tax.
❖ What are the circumstances in which a claim for refund of tax may arise? Describe briefly the procedure of claiming a refund.
❖ What do you understand by the term appeal? Explain the procedure for filing an appeal to commissioner [appeals].
❖ What are the different penalties which can be imposed under the provisions of income tax act 1961?

Short Questions

17. Discuss section 80TTA.
18. Discuss the term Karta.
19. Discuss the term HUF.
20. What is LLP.
21. MAT.
22. Dates for filing the income tax return.
23. What is PAN?
24. Difference between MAT and AMT.

25. Advance payment of tax.
26. Give five examples of TDS.
27. Define the term refund.
28. TAN.
29. What is income tax appeal?
30. Appellate tribunal.
31. Scrutiny assessment.
32. All coparncers of HUF are members but all members are not coparncers. Justify.

Artificial intelligence

UNIT – 1

1. Explain the characteristics of Production Systems?

2. Describe the water-jug problem using production rules.

3. Explain the best first search based A* algorithm with example.

4. Explain the hill-climb method with different limitations using suitable Examples.

5. Explain the BFS with advantages and disadvantages.

6. Explain the best first search based AO* algorithm with example.

7. Explain the DFS with advantages and disadvantages.

8. What do you understand by artificial intelligence?

9. Explain the Production Systems?

10. Explain the control strategies in search techniques?

UNIT – 2

11. Represent the following facts in predicate logic:

    a) Spot is a dog.
    b) Spot has a tail.
    c) All dogs have tails.
    d) Marcus was a man.
    e) Marcus was a Pompeian.
    f) All Pompeians were Romans.
    g) Caesar was a ruler.
    h) All Romans were either loyal to Caesar or hated him.
    i) Everyone is loyal to someone
    j) People only try to assassinate rulers they are not loyal to.
    k) Marcus tried to assassinate Caesar.

12. Describe all the different approaches for Knowledge Representation.

13. Compare the propositional and predicate logic?

14. Explain the Resolution in knowledge representation.
15. Explain the non monotonic reasoning in knowledge representation.
16. Explain the monotonic reasoning in knowledge representation.
17. Explain the backword chaining algorithms?
18. Explain the Resolution for first order logic or inference rule?
19. Prove by resolution(any pbm).
20. Illustrate the first order logic in knowledge representation?

UNIT – 3

21. Explain the Baye's theorem ?
22.Explain how Bayesian statistics provides reasoning under various kinds of uncertainty.

23. Construct semantic net representations for the following.

• pomepeian (marcus), blacksmith(marcus)

• mary gave the green flowered vase to her favorite cousin.

24.construct partitioned semantic net representations for the following :

• every batter hit a ball

• all the batters like the pitcher

25. Give the semantic representation of "john loves Mary".

26. Describe about the frames with example.

27. Describe about the fuzzy logic?

28. Elaborate forward and backward chaining.

29. Explain the probabilistic reasoning with reference of AI.
30. Elaborate conceptual dependency.

UNIT – 4

31. Explain min-max search procedure?

32. Describe alpha-beta pruning and give the other modifications to the minmax procedure to improve its performance.

33. How searching is used to provide solutions and also describe some real world problems?

34. Describe alpha-beta pruning and its effectiveness**.**

35. Define planning with reference of AI.

36. What are the features of an ideal planner?

37. What are the components that are needed for representing an action?

38. Define natural language processing.

39. Explain the block world problem in robotics?

40. Write in detail about any two informed search strategies?

UNIT – 5

1) Explain the various forms of learning.

2) How is the learning process in a decision tree?

3) What are the various methods of logical formulation in logical learning?

4) How are explanation based learning done?

5) Elaborate upon inductive logic programming.

6) Write in detail about the Expert system.

7) Give an overview of a neural network.

8) Explain multilayer feed forward neural networks with an algorithm ?

9). Explain the nonparametric learning methods.

10) How learning is done on a complete data using statistical methods?

Computer Organization & Architecture

UNIT-1

What is register transfer language? Explain the data movement among registers.

What is control function? Explain with block diagram & timing diagram.

Explain common bus system for 4-bit four register.

What are three state bus buffers? Explain with diagram.

What are microoperations? Classify different category.

Show the block diagram of the hardware that implements the following register transfer statement:

T2:   R2 ⟵   R1,   R1 ⟵ R2

Explain 4-bit binary adder- subtractor with diagram.

Explain 4-bit binary incrementer.

Explain 4-bit binary arithmetic circuit.

Explain the hardware implementation of logic microoperation.

UNIT-2

What is central processing unit? Explain with its major components.

Explain CPU general register organization.

Explain Stack organization of memory & its function.

What do you understand by instruction format? Explain different types of instruction format.

What is addressing mode? Explain different types of addressing mode.

An instruction is stored at location 300 with its address field at location 301. The address field has the value 400. A processor register R1 contains the number 200. Evaluate the effective address if the addressing mode of the instruction is (a) direct (b) immediate **(b)** relative (d) register indirect (e) index with R1 as the index register.

Explain the subroutine call & return.

What is program interrupt? Explain the different types of interrupt.

What is instruction pipeline? Explain four segment instruction pipeline.

What is parallel processing? Explain different types of parallel processing.

UNIT-3

Explain hardware implementation of addition & subtraction with signed magnitude data.

Explain Hardware algorithm with flow chart for add & subtract operation signed magnitude data.

Explain algorithms for addition & subtraction with in signed-2's complement representation.

Explain the flow chart of multiplication algorithm for signed magnitude data.

Implement the multiplication of 23(10111) and 19(10011) using multiply algorithm.

Explain the hardware implementation of Booth multiplication algorithm.

Explain the Booth algorithm using flow chart.

Implement the multiplication of (-9) * (-13) using Booth algorithm.

What is array multiplier?

Explain the hardware implementation of 4-bit by 3-bit array multiplier.

UNIT-4

What is control memory? Explain the microinstruction microprogram.

Explain the micro programmed control organization with diagram.

What is control address register?

Explain the next address sequencer.

Explain the microinstruction format.

Explain the Horizontal microinstruction format.

Explain the vertical microinstruction format

Using the mapping procedure described the first microinstruction format for the following operation code (a) 0010 (b) 1011 (c) 1111

Formulate a mapping procedure that provides eight consecutive microinstruction for each routine. The operation code has six bits and the control memory has 2048 words.

Explain the difference between hardwired control and micro programmed control.

UNIT-5

Explain the Memory hierarchy in a computer system.

What is ROM ? Explain the Bootstrap loader.

What is RAM? Explain the working with block diagram.

(a) How many 128 x 8 RAM chips are required to provide a memory capacity of 2048 bytes?

(b) How many lines of the address bus must be used to access 2048 bytes of memory?

What is Associative Memory/ explain its hardware organization.

What is Cache memory? Explain the locality of reference.

find out the hit ratio of cache memory if total hits of cache is 50 and misses is 35.

A computer uses RAM chips of 1024 x 1 Capacity.

(a) How many chips are needed, and how should their address lines be connected to provide a memory capacity of 1024 bytes.

(b) How many chips are needed to provide a memory capacity of 16K bytes?

What is virtual memory? Explain the mapping of virtual address in memory table.

What is DMA? Explain the working of DMA controller.

Subject: DSA

UNIT – 1

1. Explain type of data structure and operations which are performed on data structure.

2. What is array. Explain the row major and column major representation of arrays. Give address calculation formula for each with example.

3. What is data structure?

4. List out the areas in which data structures are applied extensively?

5. Explain the Types of Link list?

6. What is the data structures used to perform recursion?

7. What do you understand by Sparse matrix?

8. How the Algorithms play important role in Data Structure.

9. Explain the complexity and the Asymptotic Notation of

Algorithms?

10. Explain the singly and doubly link list.

UNIT – 2

11 Write Algorithms for conversion of infix expression into postfix conversion.

12. convert the following expression into postfix

$$A*(B+D)/E-F*(G+H/K)$$
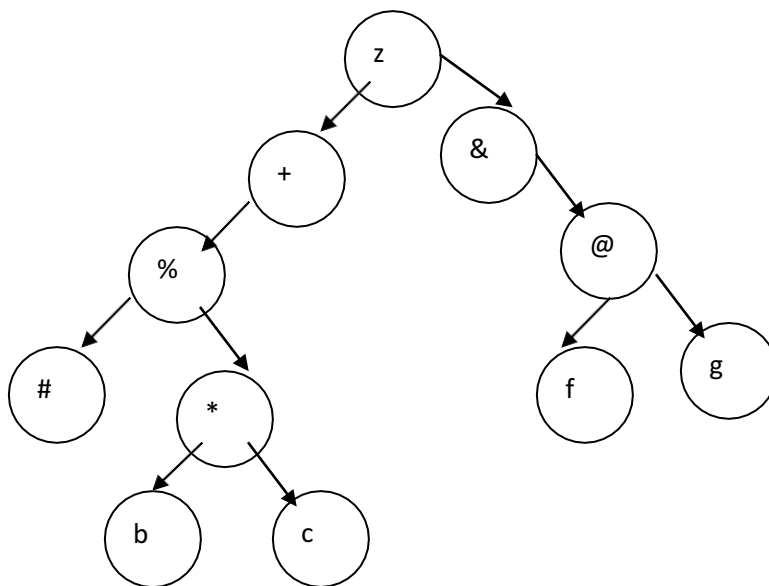
13. Evaluate the following expression which is in postfix

12, 7, 3,-, /, 2, 1, 5, + , *, +

14. Explain the stack with its operations?

15. Describe the Priority queue with example?

16.Explain the Tower of Hanoi problem with algorithms.

17. What are the notations used in Evaluation of Arithmetic Expressions using prefix and postfix forms?

18.Convert the expression ((A + B) * C – (D – E) ^ (F + G)) to equivalent Prefix and Postfix notations.

19. What do you understand by deque?

20. Explain push () and pop() operations.

UNIT – 3

21.Define the complete binary tree.

22. find the preorder, post order and in order of the following binary tree

23. Write a algorithm for preorder traversal in binary tree.

24. Explain the Binary search tree .

25. write a algorithm for find the location of a given item in BST.

26. Differentiate the B tree and B+ tree

27. There are 8, 15, 13, 14 nodes were there in 4 different trees. Which of them could have formed a full binary tree?

28. In the given binary tree, using array you can store the node 4 at which location?

29. Explain the multi way trees?

30. What do you understand AVL tree ?

UNIT – 4

31.Explain the BFS(breadth first search)with example.

32.Explain the DFS(deapth first search)with example.

33. Explain the minimum spanning tree.

34. write the Prims algo for minimum spanning tree.

35. write the krushkal algo for minimum spanning tree.

36. Explain the shortest path algorithms.

37. Explain the Adjacency matrix with example.

38. Explain the Adjacency list with example.

39. Explain single source path problem with example.

40. Explain multi source path problem.

UNIT – 5

41. Explain the bubble short with algorithms.

42. Explain the Quick sort with algorithms.

43. Explain the bucket sort with algorithms.

44. Explain the insertion sort with algorithms.

45. Explain selection sort with algorithms.

46. Explain hasing and symbol table.

47. What do you understand by merging?

48. Explain the Radix sort with algorithms.

49. Explain the string search method?

50. Write an algorithm for binary search?

Database Management System

UNIT – 1

1. What is DBMS? What are the advantages and disadvantages offered by data base management system?

2. What are the various functional components of a database system? Describe the architecture of data base management system.

3. Discuss the main characteristics of the database approach and how it is differs from file processing system?

4. Discuss the responsibilities of DBA. Explain the three level Architecture of DBMS.

5. What is meant by Data Independence? Explain the types of Data Independence with the help of an example.

6. What do you understand by Data Abstraction? Explain the different levels of Data Abstraction.

7. What is storage manager? Explain the components of storage manager and define the purpose of storage manager?

8. Describe each of the components of a DBMS
   (a) Data Dictionary (b) Data Security and Integrity (c) Concurrent data Access for Multiple Users

9. Describe the followings:
   (a) Data Abstraction.
   (b) Applications of DBMS.
   (c) Data Independence
   (d) Storage Manager
   (e) Transaction Management

10. Write short notes on:
    (a) Physical schema   (b) Logical schema.   (c) Transaction Management

    (d) Data Base Administrator

UNIT – 2

1. What is an Entity Relationship diagram, describe its components using suitable example.

2. Describe the Candidate Key, Primary Key and super key? How Primary Key is different from foreign key.

3. Construct an ER-diagram for hospital with a set of patients and a set of medical doctors. Associate with each patient a log of the various tests and examinations conducted.

4. Explain the following terms in respect to E-R diagram with suitable examples:-

(a) Entity and Attributes

(b) Generalization and Specialization

(c) Relationship and Relationship sets

(d) Key Constriants

5. Draw an E-R diagram for a Banking enterprise and University management

6. Draw an E-R diagram for Airline Schema

7. Draw an E-R diagram for Library Management System

8. Draw an E-R Diagram for ATM, Hospital and Insurance Company.

9. (a) What are weak and strong entities? How are they represented in E-R diagram?

(b) What is an Attribute? Explain different types of attributes.

(c) Define Cardinality Mapping?

10. (a) Explain the importance of Aggregation over Ternary Relationship.

(b) Create an E-R Model

Consider the following tables:

Employee (Emp_no, Name, Emp_city, Emp Address)

Company (Emp_no, Company_name, Salary, department)

UNIT – 3

1. What is Relational algebra? Explain various relational algebra operators with suitable example.

2. (a) What is a JOIN Operation? How 'Natural –Join' operation is performed?

   (b) How many types of Join Operation? Describe the benefits of joins?

3. Differentiate between Cartesian product and natural join operations used in relational algebra.

4. What is relational calculus? Describe the Domain and Tuple calculus.

5. Describe the SELECT and PROJECT operation using example in relational algebra.

6. Describe the UNION and INTERSECTION Operation using suitable example.

7. Describe the Circumstances when you would use each of the following relational Algebra

Operations

a) SELECT

b) PROJECT

c) JOIN

d) DIVISION

8. Write short notes on followings

(a) RENAME operator

(b) SET-DIFFERENCE

(C) CARTESIAN- PRODUCT

9. (a) What is meant by a unary and binary operation? What are they?

   (b) Define the equijoin and non equijoin?

10. Define Relational model and relation Algebra. Define the basic operations of Relational algebra.

UNIT – 4

1. Define the Structured Query Language. Give the classification of the query language.

2. What are aggregate functions? Describe the aggregate functions supported by SQL.

3. With relevant examples discuss the following in SQL.

(a) Data Definition Language.   (b) Data Manipulation Language

(c) Data Control Language

4. Define the following in context of SQL

(a) DISTINCT clause (b) GROUP BY Clause (c) ORDER BY clause   (d) WHERE clause

5. What is meant by the term Query Processing? What are the various steps involved in this

Process ?

6. What is structured query language? How the DDL and DML are different? Explain.

7. Consider the employee database, where the primary keys are underlined.

Employee (empname , street, city)

Works (empname, companyname, salary) Company (companyname, city)

Manages (empname, managername)

(a) Find the names of all the employees who work for First Bank Corporation.

(b) Find the names, street addresses, and cities of residence of all employees who work for First Bank Corporation and earn more than 300000 per annum.

(c) Find the names of all employees in this database who live in the same city as the companies for which they work.

(d) Find the names of all the employees who earn more than every employees of Small Bank Corporation.

8. Consider the relational table given below and answer the following SQL queries.

Employee (SSN-No, Name, Department, Salary)

(a) List all the employees whose name starts with the letter 'L'.

(b) Find the maximum salary given to employees in each department.

(c) Find the number of employees working in 'accounts' department.

(d) Find the second maximum salary from the table.

(e) Find the employee who is getting the minimum salary.

9. Describe the Triggers and Active Database in Structured Query Language

10. Explain the following Aggregate functions in SQL

   (a) Average: avg
   (b) Minimum: min
   (c) Maximum: max
   (d) Total: sum
   (e) Count: count

UNIT – 5

1. What is Normalization? Explain the various normalization techniques with suitable example.
2. Justify the need for normalization with examples. Describe the comparison between BCNF and 3 NF in normalization.
3. What do you understand by backup and recovery? How you can recover data from catastrophic failures?
4. What are ACID properties? Explain the ACID properties of a transaction management

5. Define the Normalization? Explain 1NF, 2NF, 3NF and BCNF with simple example.

6. What are the concurrency control schemes? What happened when a Deadlock occurs?

7. Define the locking techniques for concurrency control. Distinguish between Shared andExclusive locks.

8. Define two phase locking and distinguish between static, dynamic locking and strict twophase locking.

9. What do you understand by Normalization? Explain normalization techniques usingfunctional dependencies with example.

Operating Systems

UNIT – 1

1. What do you understand by Operating system? Also explain the role of operating system in computer.
2. Write short notes on following:
    a) Time Sharing Systems
    b) Main Frame Systems
    c) Parallel Systems
    d) Real Time systems
    e) Dual Mode Operation
3. What are the various services provided by Operating System? Explain in brief.
4. What do you understand by System Calls? Also explain the various types of system calls.
5. What do you understand by process and also write down the process states in detail.
6. What is the role of PCB (Process Control Block)? Also explain each component of PCB.
7. What do you understand by Schedulers? Also explain the various types of it.
8. What do you understand by Inter Process Communication?
9. Why CPU scheduler is needed in Operating system? Also explain the role of dispatcher.
10. What are various criteria to be considered when scheduling is performed?
11. Write Short Note on following Scheduling:
    a) FCFS(First Come First Serve)
    b) Preemptive SJF(Shortest Job First)
    c) Non-Preemptive SJF(Shortest Job First)
    d) Round Robin
12. Suppose a system having five processes with following information.

Process Burst	Arrival Time	Burst Time
P1	0.0	8
P2	2.0	2
P3	0.0	1
P4	3.0	4
P5	1.0	3

Calculate Waiting time for each process, Average waiting time and also draw the Gantt chart for scheduling of process of following schemes.
    a) FCFS
    b) Preemptive SJF
    c) Non-Preemptive SJF
    d) Round Robin (quantum=2)

13. Explain the concept of priority scheduling in detail.
14. What do you understand by Multilevel Queue?
15. Explain the concept of Multilevel Feedback queue.

UNIT – 2

16. What do you understand by critical section problem? Explain with suitable example.
17. Explain "Semaphore as a General Synchronization Tool".
18. Write Short note on following classical problems of synchronization:

    a) Bounded-Buffer Problem

    b) Readers and Writers Problem

    c) Dining-Philosophers Problem

19. What do you understand by Dead Lock? Explain the various conditions which may lead to a Deadlock.
20. Explain Resource Allocation Graph in detail. How it can lead to determine a deadlock.
21. How a dead lock can be prevented to enter into the system.
22. What do you understand by dead lock avoidance? Explain Banker's Algorithms in detail with suitable example.
23. How a systems can be recovered from dead lock.

24. What do you understand by Logical Addressing and Physical addressing?
25. What do you understand by Swapping? Explain Schematic View of Swapping in detail.
26. Write Short Note on following:

    a) Contiguous Allocation scheme : Best Fit, Worst Fit, First Fit
    b) Fragmentation
    c) Paging
27. What do you understand by Paging? Explain with suitable example.
28. Explain the implementation of paging in detail.
29. Explain segmentation in detail.
30. What do you understand by Virtual Memory.? How it can be implemented by Demand Paging.
31. How a page fault is handled in demand paging.
32. What is the need of page replacement?
33. Consider the following String

reference string

7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1

Perform the following page replacement algorithms with frame size of four and also compare their page faults.

    a) FIFO (First In First Out)

b) Optimal

c) LRU (Least Recently Used)

34. Write short note on following:

a) Thrashing

b) Belady's Anomaly

c) Segmentation with paging

UNIT – 3

35. What do you understand by Device Management? Also explain the functions performed by it.

36. How many categories are there in system's peripheral devices? Explain each category in detail.

37. What do you understand by Dedicated Devices? List their pros and cons.

38. What do you understand by Shared Devices? List their pros and cons.

39. What do you understand by Virtual Devices? List their pros and cons.

40. Explain Disk Scheduling with any suitable algorithm.
41. Consider the following sequence
    Queue - 98, 183, 37, 122, 14, 124, 65, 67
    With Request queue 0-199 and Head Pointer at 53
    Perform the Disk Scheduling using FCFS (First Come First Serve) manner and also calculatetotal head movement.
42. Consider the following sequence
    Queue - 98, 183, 37, 122, 14, 124, 65, 67
    With Request queue 0-199 and Head Pointer at 53
    Perform the Disk Scheduling using SSTF manner and also calculate total head movement.
43. Consider the following sequence
    Queue - 98, 183, 37, 122, 14, 124, 65, 67
    With Request queue 0-199 and Head Pointer at 53
    Perform the Disk Scheduling using SCAN algorithm and also calculate total head movement.
44. Consider the following sequence
    Queue - 98, 183, 37, 122, 14, 124, 65, 67
    With Request queue 0-199 and Head Pointer at 53
    Perform the Disk Scheduling using C-SCAN algorithm and also calculate total headmovement.
45. Write a short note on Swap-Space Management.

UNIT – 4

46. Describe File system and their attributes in detail.
47. What are the various operations performed over files?
48. Write short note on File Access Methods.
49. Explain file system structure in detail.
50. What are the various allocation methods in contrast to File System? Also list their pro andcons.
51. How free space management improves the efficiency and performance of the system.
52. What do you mean by attack? Also explain the type of attacks.
53. Write a short note on Cryptography.
54. List the advantages of Linux Operating System.
55. Compare the Linux operating system and windows operating system.

Question Bank

Introduction to Computers Fundamental and IT

UNIT – 1

1. Define Computer? Also explain the various features of computer system.
2. Explain in detail the history of computer; also explain the evolution process of it.
3. Draw a block diagram of basic components of a computer system. Explain each component in detail.
4. What is role of input devices? Write down any three input devices with their full description.
5. What is role of output devices? Write down any three output devices with their full description.
6. What are the various characteristics of computer system?
7. Write down the limitations of computer system.
8. What are the various types of computer system?
9. Explain memory hierarchy in detail.
10. What do you understand by secondary storage?
11. What do you understand by cache memory? Also explain the role of cache in computer system.

UNIT – 2

12. What are the internal and external commands?
13. Explain Overview of architecture of windows.
14. Explain Overview of Linux architecture.
15. Define the Windows 2000 and NT.
16. What are System Tools and Utilities?
17. What are the steps of rpm and deb based packages.
18. What do you understand by Operating system? Also explain the features of Operating system.
19. Define Open Source Technology in detail. Also explain their advantages.

UNIT – 3

20. What do you understand by Positional and non-positional numbers? Explain with suitable example.
21. Explain the characteristics of following number systems?

    a) Decimal Number System
    b) Octal Number System
    c) Hexadecimal Number System
    d) Binary Number System

22. What do you understand by EBCDIC and ASCII Codes of computer systems? Explain with suitable example.
23. Explain 1,s and 2,s complement representat

24. Convert the following Numbers.

     a) $(10101)_2 = (?)_{10}$
     b) $(1110001)_2 = (?)_{10}$
     c) $(62)_8 = (?)_{10}$
     d) $(2085)_8 = (?)_{10}$
     e) $(1CE)_{16} = (?)_{10}$
     f) $(2AF)_{16} = (?)_{10}$

25. Convert the following Number System.

     a) $(85)_{10} = (?)_2$
     b) $(954)_{10} = (?)_2$
     c) $(624)_{10} = (?)_8$
     d) $(257)_{10} = (?)_8$
     e) $(351)_{10} = (?)_{16}$
     f) $(6812)_{16} = (?)_{16}$

26. Convert the following Number System.

     a) $(534)_8 = (?)_{16}$
     b) $(101011)_2 = (?)_8$
     c) $(624)_8 = (?)_2$
     d) $(11101)_2 = (?)_8$
     e) $(3B1)_{16} = (?)_2$
     f) $(AC2)_{16} = (?)_8$

27. Convert the following Number System.

     a) $(110.111)_2 = (?)_{10}$
     b) $(10.011)_2 = (?)_{10}$
     c) $(12.5)_8 = (?)_{10}$
     d) $(49)_8 = (?)_{10}$

28. Perform the followings:

     a) $(110111)_2 \ + \ (111001)_2 \ \ = (?)_2$
     b) $(11101)_2 \ \ + \ (110)_2 \ \ \ \ = (?)_2$
     c) $(101101)_2 \ + \ (1001)_2 \ \ \ = (?)_2$
     d) $(1011)_2 \ \ \ + \ (100011)_2 \ \ = (?)_2$

29. Find the complement of the followings:

    a) $(56)_{10}$
    b) $(64)_8$
    c) $(1011010)_2$

30. Perform the following by complement

    method:a) $(96)_{10} - (79)_{10}$
    b) $(46)_{10} - (169)_{10}$
    c) $(111)_2 - (10)_2$
    d) $(1110)_2 - (10010)_2$
    e) $(59)_8 - (14)_8$

UNIT – 4

31. What do you understand by Computer Network?
32. Explain common types of Networks.
33. What is LAN, PAN, WAN and MAN?
34. Explain Network Topologies.
35. Explain Computer Protocols.
36. Differentiate between Star, Bus and MESH Topologies.
37. Explain Data base Management System.
38. What are the advantage and disadvantage of DBMS?
39. What is Network Media?
40. Explain advantage and disadvantage of Tree, Ring and Hybrid Topologies.

UNIT – 5

41. Explain MS Office, MS Power Point and MS Excel.
42. Introduction to Electronic Spread sheet.
43. What are the Applications of Electronic Spread Sheets?
44. Explain Types of Spreadsheet.
45. What are the features of MS Excel?
46. Define the MS Power Point and its Features.
47. What is Presentations?
48. What are the contents of MS-Excel?
49. What are the MS Office Packages?

Computer Networks

UNIT – 1

QUE.1) What is computer network? Discuss various types of networks topologies in computer network. Also discuss various advantages and disadvantages of each topology.

QUE.2) (a) What are the applications of Computer Networks?

(b) Explain the advantages and disadvantages of computer network.

QUE.3) Explain the following:-

a) LAN

b) MAN

c) WAN

d) ARPANET

QUE.4) What is IP addressing? How it is classified? How is subnet addressing is performed?

QUE.5) Explain in detail Internet Backbones in detail.

QUE.6) What is the difference between NAP's and ISPs

QUE.7) Explain in detail Access Networks and Physical Media

QUE.8) What is vulnerable period? How it affects the performance in MAC protocols?

QUE.9) What are the different types of cabling supported by Ethernet standard?

QUE.10) What is OSI Model? Explain the functions and protocols and services of each layer?

UNIT – 2

QUE.1) What is TCP/IP Model? Explain the functions and protocols and services of each layer? Compare it with OSI Model.

QUE.2) What is IPv6? Explain its advantages over IPv4. Also explain its frame format.

QUE.3) How does DNS Work. explain complete process.

QUE.4) What are header and trailers and how do they get added and removed?

QUE.5) Explain the mail services Electronic mail,SMTP,POP,POP3.

QUE.6) Explain the type of generic domains?

QUE.7) What are the applications of application layer?

QUE.8) Why do HTTP,FTP,SMTP,POP3and ICMP run on top of TCP rather then UDP?

QUE.9) Explain the process of ARP and RARP?

QUE.10) Explain the following:-

a) SMTP

b) DNS

c) FTP

d) Electronic mail

UNIT – 3

QUE.1) Explain the Multiplexing and Demultiplexing applications with example

QUE.2) Explain the following:

a) TCP

b) UDP

QUE.3) Explain in detail CSMA Protocol in detail.

QUE.4) Explain in detail CSMA/CD Protocol in detail. How it detects collision.

QUE.5) Distinguish between TCP and UDP and explain each field of TCP and UDP header formats?

QUE.6) How are TCP and UDP used differently on the basis of different applications?

QUE.7) Why TCP control the conjuction.justify your answer.

QUE.8) Explain the Principles of Reliable Data Transfer-Go back to N and Selective Repeat

QUE.9) What is the process of TCP connection management explain with example.

QUE.10) Write Short Note on

a) Segment Structure

b) Sequence Numbers

c) Acknowledgement numbers

UNIT –4

QUE.1) What is pure ALOHA and slotted ALOHA? Consider the delay of both at low load. Which one is less? Explain your answer.

QUE.2) What is the difference between routing in circuit switching network and packet switching network.Discuss the advantages and disadvantages of bothof them.

QUE.3) What is the difference between IPV4 and IPV6 addressing schemes. Discuss in detail the characteristics of IPV6.

QUE.4) Expalin the type of routing algorithms with example.

QUE.5) What is the difference between Link State routing Algorithm and distant Vector routing Algorithm

QUE.6) What is the Router Components. explain briefly?

QUE.7) Explain the Point To Point Protocol (PPP) with Header format.

QUE.8) What is PPP,LCP and PAP. explain with Header format and example.

QUE.9) Explain the Authentication PAP and CHAP and Network Control Protocol (NCP).

QUE.10) Write short note on.

a) Point To Point Protocol (PPP)

b) Network Control Protocol (NCP

UNIT –5

QUE.1) Write various SONET multiplexing functions.

QUE.2) Explain the SONET Topologies?

QUE.3) Explain the Synchronous Transport Signals with example.

QUE.4) What is Virtual Tributaries and also explain types of Virtual Tributaries.

QUE.5) What is the difference between SONET Devices (Sections, Lines and Paths)?

QUE.6) Explain pure-ALOHA and slotted- ALOHA systems. Give the expression for throughout for each,clearly explaining the various terms.

QUE.7) Explain 1-persistent, p-persistent and 0-persistent CSMA giving strong and weak points of each.

QUE.8) If the transmitted code word is 10011000 and the received code word is 11001001. Whatis the error word ? Write transmitted code word , received code word and error word as polynomials.

QUE.9) What are the advantages of cell switching that is used in ATM?

QUE.10) What is the average number of transmission required to send a frame of length 1600 bytes correctly, if the bit error rate is 1 x 10-6

SUBJECT: COMPUTER GRAPHICS

UNIT-I

Que. 01. Explain the Raster Scan Graphics with application area of Raster Graphics. Also explain how we generate a raster image.

Que. 02. Differentiate between: -

(a) Random Scan and Raster Scan.
(b) Beam penetration method and Shadow mask method.

Que. 03. Explain the working principle of dot matrix, inkjet and laser printer.

Que. 04. What is the advantage of using interlaced monitors?

Que. 05. What is the purpose of a display processor in computer system? Give the architecture of a raster graphics system with a display processor.

Que. 06. Standard TV has 480 scan lines if the aspect ratio is ¾ what is the capacity of frame buffer needed in 2 bits per pixel is used?

Que. 07. Describe working of CRT (cathode ray tube) monitor. How different grey levels are incorporated in it?

Que. 08. What is basic purpose of interactive input devices? What are basic functions provided by these input devices?

Que. 09. Describe briefly the various graphical input and positioning techniques.

Que. 10. Explain working principle of scanner, track ball, digitizers (graphics tablets), and joysticks.

Que. 11. Explain following terms in Raster Scan System: -

(a) Refreshing
(b) Flicking
(c) Interlacing
(d) Resolution

UNIT-II

Que. 12. Explain line drawing DDA method and also give algorithm of it.

Que. 13. Derive the decision parameter to draw line using Bresenham's algorithm.

Que. 14. Explain Bezier curve with its properties and compare this curve with B-sp-line curve.

Que. 15. Find the points lying on the circle centered at (5, 10) and having radius 8 using Bresenham's circle algorithm (Mid Point).

Que. 16. Derive the decision parameter to draw circle using Bresenham's algorithm (Mid Point).

Que. 17. What are drawbacks of DDA line drawing algorithm? How they are removed or minimized in Bresenham's algorithm?

Que. 18. Describe symmetric DDA algorithm for circle drawing and tell advantages over general method.

Que. 19. What are the advantages and disadvantages of Bresenham's algorithm?

Que. 20. Describe general method of circle drawing and tell its disadvantages.

UNIT-III

Que. 21. A triangle having the vertex at A (0, 0), B (5, 5) and C (10, 4). Find the transformation matrix for rotation of 45^0 about origin.

Que. 22. Why are homogeneous coordinates are needed in transformation matrices? Derive the transformation matrix for rotation about origin by angle in a anticlockwise direction.

Que. 23. Explain the perspective transformation.

Que. 24. Find out show the transformer to reflect a polygon whose vertices are A(-1, 0), B(0, -2), C(1, 0), and D(0, 2) about the line y= x+2.

Que. 25. Calculate three transformation matrixes for producing any parallel projection of say point (a, b, c) on to xy plane.

Que. 26. Consider a live segment AB with end points A(4, 3, 2) and B(8, 3, 2) find out perspective projection of AB onto plane x=0 from centre of project at x=-4.

Que. 27. What is perspective projection? What do you mean by vanishing point and perspective fore shortening?

Que. 28. An object is to be rotated about 45^0 about a_c axis passing through origin and point (12, 20, 10). Work out transformation to carry out.

Que. 29. Explain representation of 3D objects on 2D screen.

Que. 30. Show that two successive reflections about either of the coordinate's axes is equivalent to a single rotation about the coordinate origin.

Que. 31.

Explain the following transformation with respect to origin in 2D and 3D coordinate system and also give matrix representation: -

(i)   Translation
(ii)   Rotation
(iii)   Scaling
(iv)   Reflection

UNIT-IV

Que. 32.

What is line clipping? Explain any one polygon clipping algorithm.

Que. 33.

What is the difference between Gouraud shading and Phong shading? Explain any one rendering method.

Que. 34.

Explain basic ray tracing method.

Que. 35.

What do you know about color models? Give the transformation equation from one to another color model for any two.

Que. 36.

How to eliminate the hidden surface by object space method?

Que. 37.

Explain the image space method of hidden surface elimination.

Que. 38.

Explain the following basic illumination models:

(i)   Diffuse Reflection
(ii)   Specular Reflection

Que. 39.

Explain following color model:

(i)   RGB
(ii)   YIQ

Que. 40.

Write short note on any three: -

(i)   Phong Shading
(ii)   Gourand Shading
(iii)   CMY Color Model
(iv)   HSV Color Model

UNIT-V

Que. 41.

Describe different multimedia components in detail.

Que. 42.

"Without multimedia graphics is incomplete" Comment on this. Explore the application of Multimedia.

Que. 43.

What is SCSI? What is role of it in computer system?

Que. 44.

How to use IDE interface for connecting devices?

Que. 45.

What is the role of MCI in multimedia application?

Que. 46.

Explain any two multimedia file formats.

Que. 47.

Explain various multimedia tools in brief.

Que. 48.

What is the role of MIDI in multimedia system?

Que. 49.

Explain following file formats: -

(i)   RTF
(ii) TIFF
(iii) DIB

Que. 50.

Write short note on any two:

(i)   Multimedia Tools
(ii) JPEG
(iii) MPEG

Software Engineering

UNIT – 1

1. What is software engineering, what do you understand by the term "software"? Discuss its characteristics and components?

2. Discuss the software process and product metrics with the help of examples and explain the SDLC.

3. i) Discuss in detail FAST method of requirement with an illustration.
   ii) What are the characteristics and criteria of design?

4. Explain iterative waterfall and spiral model for software life cycle and various activities in each phase.

5. What is a prototype model? Under what circumstances is it beneficial to construct a prototype model?

6. Describe the Spiral Model of software development with strength, weakness. Also give the reason for using Spiral Model.

7. What is System Development Life Cycle(SDLC). Explain its Phases.

8. Discuss any two software life cycle models in detail.

9. Explain Spiral model and win-win spiral model in detail?

10. Estimate the effort parameters from the set of data as shown in table.

Project	Size(KLOC)	Effort(PM)
1.	30	84
2.	20	56
3.	50	140
4.	10	28

11. Software is only element of a larger system with subsystem. Propose a set of phases for a software system life cycle.

UNIT – 2

1. What is Software Development Life Cycle (SWDLC) and explain the all phases of SWDLC.
2. Describe the COCOMO Model of Software engineering.
3. How we Estimate cost of a software by Constructive Cost model (COCOMO). Explain all three modes of COCOMO Model with example.
4. What are the relative advantages of using either the LOC or the FP metrics to measure the size of a software product?
5. Suppose that a system is developed and line of source instruction is 100KLOC. Compute the nominal effort and development time for each of the three development modes i.e. Organic, Semidetached and Embedded.

   Note:- Nominal effort means all the 15 Cost driver attribute have nominal values = 1. And Effort & Time Constant are given :-

Modes	a	b	c	d
Organic	3.2	1.05	2.5	0.38
Semidetached	3.0	1.12	2.5	0.35
Embedded	2.8	1.20	2.5	0.32

6. Explain the Putnam resource allocation model and what are the limitations of this model?
7. What do you mean by Risk Analysis? Explain different steps of Risk Analysis.
8. Why requirement analysis is important in development of software? Describe analysis principles in details.
9. Explain in detail available for project scheduling? With an example describe how to track the schedule?

10. Define Requirement Analysis. Write Requirement Analysis principles. Also Explain FAST & DFD Techniques of Requirement Analysis.

11. Define SRS. Also List desirable characteristics of a good SRS document.

12. What are the umbrella activities of a software process?

13. Compute the function point value for the project with the following information domain characteristics.

    Number of user input=32

    Number of user output=60

    Number of user inquiries=24

    Number of files=8

    Number of external interface=2

    Assuming, the weighting factors value are average. The various complexity adjustments values are average.

14. Compute the function point, Productivity, Documentation, Cost per function point for the following data :

    Number of user input = 24

    Number of User Output =46

    Number of Inquires=8

    Number of Files=4

    Number of External Interface=2

    Effort=36.9 PM

    Technical Documents=265 Pages

    User Documents=122 Pages

    Cost=$7744/month

    And the various processing complexity factors are : 4,1,0,3,3,5,4,4,3,3,2,2,4,5.

15. Estimate the effort required,the nominal development time and the total number of people to develop the organic model software product,where the project size is 33,200 line of code.

UNIT – 3

1. a) Elaborate all requirements analysis principles.

   b) Construction an FSA which recognizes the following set of words :

      (Read,Rest,Revise,Right,Revisit)

   c) What do you understand by data dictionary ? where and how it is used ?

2. a) What is prototyping? Give the sequence the events needed in prototyping.

   b) Write a short note on requirement analysis.

3. i) What are the goals of Software Requirement Specification?

   ii) Describe the components of software requirement Specification?

4. What re elements of requirement analysis model. Explain.

5. Discuss the finite state machine models.

6. Illustrate the types of software requirements.

7. What do you mean by the requirement, requirements analysis and requirement engineering? Explain them with the help of an example.

8. List the five desirable categories of users of the SRS document ? What are their expectations from the SRS document ?

9. Briefly explain the various characteristics of requirements.

10. Sort notes on :

    a) The Role of System Analyst

    b) SRS Review

    c) SRS Representation Guidelines

    d) Analysis Principle

11. Draw the DFD of :

    a) Library Management System

    b) Railway Reservation System

    c) Payroll System

12. Consider a photocopying machine :

    i)   Construct a DFD upto level 1 to illustrate its working.

    ii)   Also create level 2 DFD for one of the level 1 bubbles of above DFD.Also convert this DFD into CFD.

UNIT – 4

1. How functional independence is achieved in effective modular design.
2. Explain the following concepts with example :
   a) Abstraction
   b) Modularity
   c) Information hiding
3. Write a short note on design documentation.
4. Write short note on DFD and CFD.
5. What are software design principles and concepts?
6. How are concepts of coupling and software portability related? Give examples.
7. List software design fundamentals and explain each giving suitable examples.
8. a) Describe coupling and cohesion properties of module.

   b) What is structured chart? Explain the role of it in Structured Design Methodology.

9. Explain the following :
   a) Decomposition
   b) Structure portioning
   c) Stepwise Refinement
   d) Data Structure

10. Explain why it may be require to design the software architecture before the software design specification(SDS) is written.

UNIT – 5

1. Explain Object Oriented concept with an example.
2. Differentiate between classes and objects. Discuss the object oriented concepts.
3. With the help of an example. Explain how the inheritance feature of the object orientedparadigm helps in code reuse?
4. a) What is Object Oriented Analysis?

   b) What is Data Oriented Analysis?

5. Give the similarities and difference between object oriented and functional designapproaches.
6. Short notes on :
   a) Refining operation
   b) Unified modeling language
   c) Object modularization

7. What is the difference between Function-Oriented Design and Object-Oriented Design ?
8. Explain about the various design concepts considered during design?
9. Explain data architectural and procedural design for software.
10. a) What is Object Oriented analysis?

    b) Describe design tools and techniques.